

Amendments to the Claims:

Following is a listing of all claims in the present application, which listing supersedes all previously presented claims:

Listing of Claims:

1. (Presently Amended) A magnetron cathode, comprising:
a first magnet unit; and
at least two peripheral magnet units, each peripheral magnetic unit selectively
disposed around the first magnet unit,
wherein each magnet unit of the first and peripheral magnet units includes at least one
magnet, and in adjacent magnetic units like magnetic poles of the at least one magnet are
oriented in opposite directions.
~~three or more magnet units, each of which comprises a single magnet, wherein one~~
~~magnet unit is disposed around the outer circumference of another magnet unit and adjacent~~
~~magnet units have opposite poles facing toward the same direction.~~
2. (Presently Amended) The magnetron cathode according to claim 1, wherein the
first and peripheral magnet units are substantially symmetrically disposed around the same
axis.
3. (Presently Amended) The magnetron cathode according to claim 1, wherein the
~~innermost~~ first magnet unit has a hollow cavity inside thereof.
4. (Presently Amended) The magnetron cathode according to claim 1, wherein
[[each]] at least one of the first and peripheral magnet units is formed in a circular shape.

5. (Presently Amended) The magnetron cathode according to claim 1, wherein ~~[[each]]~~ at least one of the first and peripheral magnet units is formed in a polygonal shape.

6. (Presently Amended) The magnetron cathode according to claim 4 or 5, wherein each of the first and peripheral magnet units comprises one or more ~~a plurality of~~ magnets having ~~the same poles of like polarity oriented in substantially facing toward~~ the same direction.

7. (Presently Amended) A magnetron sputtering apparatus, comprising:
a first electrode ~~on which~~ for supporting a substrate to be sputtered onto; is disposed;
a magnetron cathode including a sputtering target and a second electrode coupled to the sputtering target, the magnetron cathode having a first magnet unit and at least two peripheral magnet units selectively disposed around the first magnet unit; and
~~a target facing the substrate and made of a material to be deposited on the substrate;~~
~~a second electrode disposed on the rear surface of the target;~~
~~a magnetron cathode disposed behind the second electrode and comprising three or more magnet units, each of which comprises a single magnet, wherein one magnet unit is arranged around the outer circumference of another magnet unit and adjacent magnet units have opposite poles facing toward the same direction; and~~
a support member supporting the magnetron cathode~~[[.]]~~,
wherein each magnet unit of the first and peripheral magnet units includes at least one magnet, and in adjacent magnetic units like magnetic poles of the at least one magnet are oriented in opposite directions.

8. (Presently Amended) The magnetron sputtering apparatus according to claim 7, wherein the first and peripheral magnet units are substantially symmetrically disposed around the same axis.

9. (Presently Amended) The magnetron sputtering apparatus according to claim 7, wherein the ~~innermost~~ first magnet unit has a hollow cavity defined by the support member ~~inside thereof~~.

10. (Presently Amended) The magnetron sputtering apparatus according to claim 9, further comprising a ~~cooling tube~~ for providing in which cooling water flows, ~~which is disposed in~~ to the hollow cavity.

11. (Presently Amended) The magnetron sputtering apparatus according to claim 7, wherein ~~[[each]]~~ at least one of the first and peripheral magnet units is formed in a circular shape.

12. (Presently Amended) The magnetron sputtering apparatus according to claim 7, wherein ~~[[each]]~~ at least one of the first and peripheral magnet units is formed in a polygonal shape.

13. (Presently Amended) The magnetron sputtering apparatus according to claim 7, wherein each of the first and peripheral magnet units comprises one or more ~~a plurality of~~ magnets having ~~the same poles of like polarity oriented in substantially facing toward~~ the same direction.

14. (Presently Amended) The magnetron sputtering apparatus according to claim 8, wherein each of the first and peripheral magnet units comprises one or more ~~a plurality of~~

magnets having ~~the same~~ poles of like polarity oriented in substantially facing toward the same direction.

15. (Presently Amended) The magnetron sputtering apparatus according to claim 7, wherein a distance between the substrate and the sputtering target is about ~~is disposed as close to the target as the~~ 1/4 or less of ~~[[the]]~~ a width of the sputtering target.

16. (Presently Amended) The magnetron sputtering apparatus according to claim 7, further comprising a nozzle, ~~which is~~ disposed near the sputtering target and adapted to supply an inert gas.

17. (Presently Amended) The magnetron sputtering apparatus according to claim 7, wherein the first electrode is configured as an anode of the sputtering apparatus and the second electrode is configured as a cathode of the sputtering apparatus.